

## **II. A Response to the Office Action Dated May 19, 2004:**

### **A. Status of the Claims**

Claims 2-19 were pending at the time the Office Action dated May 19, 2004 was issued. Claims 2, 8-9 and 15 have been amended. Support for the amendments can be found throughout the specification and claims as originally filed. No new matter has been added. Claims 2-19 are therefore currently pending.

### **B. The Enablement Rejections Are Overcome**

#### **1. Claims 2 and 7-19 Are Enabled**

The Action rejects claims 2 and 7-19 under 35 U.S.C. § 112, first paragraph, for lack of enablement. Specifically, the Action contends that the specification, while being enabling for the reduction of inducing labor (dependent claim 3), inducing uterine cramps (dependent claim 4), inducing milk letdown (dependent claim 5), and inducing prostaglandin release (dependent claim 6), does not reasonably provide enablement for reducing “any oxytocin-**mediated** action.” The Action, page 3.

Applicants disagree. The subject matter of claims 2 and 7-19 are enabled by Applicants’ specification.

The specification teaches how to make and use the subject matter of claims 2 and 7-19 without undue experimentation. *See United States v. Telectronics, Inc.*, 857 F.2d 778, 785 (Fed. Cir. 1988) (“The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosure in the patent coupled with information known in the art without undue experimentation.”); *see also* MPEP § 2164.01. In non-limiting embodiments, for instance, the specification provides data that shows that thiazolidinedione compounds (*e.g.*, troglitazone) can bind to Oxytocin Receptors (“OTRs”) and reduce oxytocin mediated activities.

*See, e.g.*, the specification at page 29, line 15, to page 31, line 2 (Examples 2 and 3). This data, taken alone, or when combined with the additional information in the specification or the information known to a person of ordinary skill art, is strong evidence that claims 2 and 7-19 are enabled. *See* MPEP § 2164.01(b) “stating that [a]s long as the specification discloses at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claim, then the enablement requirement of 35 U.S.C. 112 is satisfied.”) (citing *In re Fisher*, 427 F.2d 833, 839, 166 U.S.P.Q. 18, 24 (CCPA 1970)); *see also*, *Johns Hopkins Univ. v. CellPro, Inc.*, 152 F.3d 1342, 1361 (Fed. Cir. 1998) (stating that “[t]he enablement requirement is met if the description enables any mode of making and using the invention.”) (quoting *Engel Indus. Inc. v. Lockformer Co.*, 946 F.2d 1528, 1533 (Fed. Cir. 1991)).

In an effort to obtain commercially relevant subject matter at this time, however, Applicants have incorporated the subject matter of dependent claims 3-6 into independent claim 2. Based on the teachings of the specification and the Action’s indication that the subject matter of claims 3-6 are enabled, this aspect of the present enablement rejection is therefore rendered moot. The rejection of claims 2 and 7-19 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

## **2. Claims 15 and 16 Are Enabled**

The Action also rejects claims 15 and 16 under 35 U.S.C. § 112 for lack of enablement. In making this rejection, the Action admits that the specification is “enabling for the particular and specific” tocolytic agents, beta-mimetics, prostaglandin inhibitors, and calcium-blocking agents that are “disclosed in the specification in co-administering with thiazolidinedion ... .” The Action, page 5. It appears, however, that the Action rejects claims 15 and 16 because the terms “one beta-mimetic,” “at least one prostaglandin inhibitor,” or “one calcium-blocking

agent,” “are seen to be merely functional language.” *Id.* From this, the Action concludes that undue experimentation would be required to practice the subject matter of claims 15 and 16. It appears that this a “scope of enablement” rejection. *Id.*

Applicants disagree. The subject matter of claims 15 and 16 are enabled by Applicants’ specification.

The specification teaches how to make and use the subject matter of claims 15 and 16 without undue experimentation. *See United States v. Telectronics, Inc.*, 857 F.2d 778, 785 (Fed. Cir. 1988) (describing the test for enablement). Applicants’ specification provides non-limiting examples of particular beta-mimetics, prostaglandin inhibitors and calcium-blocking agents that can be used in combination with a thiazolidinedione compound. *See, e.g.*, the specification at pages 13 and 14. Also provided by the specification are non-limiting examples of how to prepare and administer thiazolidinedione compounds to an animal, both alone or in combination with tocolytic agents. *See id.* at pages 17-27. The Action even admits that the specification is “enabling for specific tocolytic agents ... in co-administering with thiazolidinedione ... .” *See* the Action, page 5. This admission is strong evidence that the present enablement rejection is improper and should be withdrawn. *See* MPEP § 2164.01(b) (stating that “[a]s long as the specification discloses at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claim, then the enablement requirement of 35 U.S.C. 112 is satisfied.”) (citing *In re Fisher*, 427 F.2d 833, 839, 166 U.S.P.Q. 18, 24 (CCPA 1970)).

The Action’s assertion that combining a thiazolidinedione with a tocolytic agent would require undue experimentation is also without merit. The use of tocolytic agents, alone, to treat or reduce the “induction of labor in a pregnant animal, induction of uterine cramps, induction of

milk letdown, or induction of prostaglandin release” is known in the art. *See, e.g.*, the specification at page 12, lines 14-23; page 13, line 22, to page 14, line 24. The Action also admits that “a number of known tocolytic agents are known to be used for treating premature labor or pre-term labor by reducing uterine contractions.” The Action, page 15. The fact that the use of tocolytic agents are known in the art is strong evidence that undue experimentation would not be required to also administer thiazolidendione in combination with tocolytic agents. *See* MPEP § 2164.01 (“The fact that experimentation may be complex does not necessarily make it undue, if the art typically engages in such experimentation.”). This is further supported by the fact that thiazolidendione compounds are currently administered to patients to treat diabetes—a fact admitted by the Action. The Action, page 12; *see also* the specification at page 4, lines 8-14. Applicants’ specification also provides non-limiting examples of how to formulate the co-administering of thiazolidendione and a tocolytic agent. *See, e.g.*, the specification, page 25, line 1, to page 27, line 9; *see also*, page 17, line 10, to page 24, line 25. It is clear, therefore, that the co-administering of a thiazolidendione compound in combination with a tocolytic agent would not require undue experimentation because the administration of these types of compounds is practiced in the art.

The Action’s statement that “the specification fails to provide working examples, i.e., testing results or data to demonstrate the instant combinations with different combinations to be administered to a host, for reducing oxytocin-mediated action in a mammal” does not support the present enablement rejection. It is well-settled that “[c]ompliance with the enablement requirement of 35 U.S.C. § 112, first paragraph, **does not** turn on whether an example is disclosed.” MPEP § 2164.02 (emphasis added); *see also In re Marzocchi*, 169 UPSQ 370 (CCPA 1971) (noting that all that is required for enablement is objective enablement, not any

particular level of efficacy). As noted in the above paragraph, the administration of a tocolytic agent and the administration of a thiazolidendione compound to an animal are practiced in the art. Combination therapy is a well known practice that is used to treat or prevent a variety of diseases and conditions. The combination of thiazolidendione with a tocolytic agent, therefore, would not require undue experimentation. *Id.* (“The specification **need not** contain an example if the invention is otherwise disclosed in such a manner that one skilled in the art will be able to practice it without an undue amount of experimentation.”) (emphasis added); *see also Atlas Powder Co. v. E.I. duPont De Nemours & Co.*, 750 F.2d 1569, 1576, 224 U.S.P.Q. 409 (Fed. Cir. 1984) (noting that the satisfaction of the enablement requirement is not precluded by the necessity of some experimentation.).

Finally, the Action appears to assert that the terms “one beta-mimetic,” “at least one prostaglandin inhibitor” and “one-calcium-blocking agent” are “purely functional” terms and that their use is improper. *See* the Action, page 6. This assertion is without basis for at least two reasons. First, Applicants do not believe that these terms are “purely functional.” These terms describe particular classes of compounds, and a person of ordinary skill in the art would be able to identify the compounds by what they are. *See* the specification, page 13, line 22, to page 14, line 24; *see also* MPEP § 2173.05(g) (“A functional limitation is an attempt to define something by what it does, rather than by what it is ...”). Second, even if these terms are functional, the use of functional terms in claims is an accepted practice. *See* MPEP § 2173.05(g) (“There is **nothing inherently wrong** with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper”) (emphasis added) (citing *In re Swinehart*, 439 F.2d 210 (CCPA 1971)). The MPEP confirms this by stating that “[a] functional limitation **must be evaluated and considered**, just like any other limitation of

the claim, for what it fairly conveys to a person of ordinary skill in the art in the context in which it is used.” *Id.*

Based on at least the above reasons, it would be improper to maintain the rejection of claims 15 and 16 under 35 U.S.C. § 112, first paragraph, for lack of enablement. This enablement rejection should therefore be withdrawn.

**C. The Rejections Under 35 U.S.C. § 112, Second Paragraph, Are Overcome**

**1. The Term “subject” Is Definite**

The Action rejects claims 2-19 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Action contends that claims 2-19 are indefinite because “one of ordinary skill in the art could not ascertain and interpret the metes and bounds of the patent protection desired as to what ‘a subject’ would be, for example, that the term ‘subject’ would be a single cell, any biological system, an animal, or a mammal or a human or any subject.” The Action, page 10.

Applicants disagree. The term “subject” is definite and satisfies all of the requirements of 35 U.S.C. § 112, second paragraph.

The term “subject” does not render these claims indefinite. A person of ordinary skill in the art would understand this term when read in light of the specification. *See* MPEP § 2173.02 (“The test for definiteness under 35 U.S.C. § 112, second paragraph is whether those skilled in the art would understand what is claimed when read in light of the specification.”) (citations and internal quotations omitted). Applicants’ specification and claims provide non-limiting examples of “subjects” that are contemplated by the present invention. *See, e.g.*, the specification at page 4, lines 21-23 (“It is contemplated that the methods described herein can be used for treating mammals, such as humans, as well as other animals.”). The term “subject” is

clear when read in light of the specification, and the fact that the Action prefers other language is not a proper basis for maintaining the present indefinite rejection. *See* MPEP § 2173.01 (“The examiner’s focus during examination of claims for compliance with the requirement for definiteness of 35 U.S.C. § 112, second paragraph is whether the claim meets the threshold requirements of clarity and precision, **not whether more suitable language or modes of expression are available.**” (emphasis added)).

The rejection of claims 2-19 under 35 U.S.C. § 112, second paragraph, for indefiniteness is improper and should be withdrawn.

## **2. The Term “BRL49653” Is Definite**

The action rejects claim 9 under 35 U.S.C. § 112, second paragraph, for indefiniteness. Specifically, the Action contends that the term “BRL49653” is an abbreviation or trademark/trade name and is therefore indefinite.

Applicants disagree. The term “BRL49653” is definite, and claim 9 satisfies all of the requirements under 35 U.S.C. § 112, second paragraph.

The term “BRL49653” is neither an abbreviation nor a trademark. This term is a synonym recognized by a person of ordinary skill in the art to describe a thiazolidinedione compound with the IUPAC-style chemical name 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl] methyl]-2,4-thiazolidinedione, which is also known by the synonym “rosiglitazone” and has the CAS number 122320-73-4. *See* the specification at page 15, line 30, to page 16, line 5; *see also* Edvardsson *et al.*, “Rosiglitazone (BRL49653), a PPAR-selective agonist, causes peroxisome proliferator-like liver effects in obese mice,” *The Journal of Lipid Research*, Vol. 40, 1177-1184, July 1999. A person of ordinary skill in the art would

therefore understand the meaning of the term “BRL49653” when read in light of the specification. *See* MPEP 2173.01.

In any event, and despite the Action’s contention, the use of a trademark or trade name in a claim is accepted practice. In this regard, the MPEP states:

Names used in trade **are permissible** in patent applications if:

- (A) Their meanings are established by an accompanying definition which is sufficiently precise and definite to be made a part of a claim, or
- (B) In this country, their meanings are well-known and satisfactorily defined in the literature.

MPEP § 608.01(v) (emphasis added). The term “BRL49653” is (1) defined in Applicants’ specification and (2) known by persons skilled in the art. The use of this term in the claim is therefore appropriate under current patent laws.

The rejection of the term “BRL49653” as being indefinite is therefore improper and should be withdrawn.

### **3. The Phrase “A Compound Related to Troglitazone” Is Definite**

The action also rejects claim 9 under 35 U.S.C. § 112, second paragraph, for indefiniteness. Specifically, the Action contends that the phrase “a compound related to troglitazone” is indefinite.

Applicants disagree. This phrase is definite, and claim 9 satisfies all of the requirements under 35 U.S.C. § 112, second paragraph.

A person of ordinary skill in the art would understand the scope of the phrase “a compound related to troglitazone” when read in light of the specification. *See* MPEP § 2173.02. In a non-limiting embodiment, for example, the specification recites: “A compound related to troglitazone is one that is substantially similar to the chemical structure of troglitazone or can be derived from troglitazone.” The specification, page 5, lines 8-10. One of ordinary skill in the art



could therefore ascertain the scope of this phrase in view of the specification. *See* MPEP § 2173.02.

The rejection of the phrase “a compound related to troglitazone” as being indefinite is therefore improper and should be withdrawn.

#### **4. Claims 8 and 9 Are Definite**

The Action rejects claims 8 and 9 under 35 U.S.C. § 112, second paragraph, for lack of indefiniteness. Specifically, the Action contends that the phrase “the thiazolidinedione comprises” is indefinite because one of ordinary skill in the art would not understand how and why a separate and independent compound such as thiazolidinedione also comprises another separate and independent compound.

Applicants disagree. The phrase “the thiazolidinedione comprises” is definite, and satisfies all of the requirements under 35 U.S.C. § 112, second paragraph.

A person of ordinary skill in the art would understand the scope of the phrase “the thiazolidinedione comprises” when viewed in light of the specification. The specification, for example, identifies non-limiting thiazolidinedione compounds. *See* the specification at page 14, line 25, to page 16, line 9. This phrase is therefore definite and satisfies all of the requirements of 35 U.S.C. § 112, second paragraph. *See* MPEP § 2173.02.

In an effort to further the prosecution of this case at this time, however, Applicants note that claims 8 and 9 now recite, in part, “wherein the thiazolidinedione **is...**” (emphasis added). The indefiniteness rejection of these claims is therefore rendered moot and should be withdrawn.

**D. The Obviousness Rejections Are Overcome**

**1. A Summary of the Rejections, the Standard for Establishing a *Prima Facie* Case of Obviousness and Summary of the Presently Claimed Invention**

***i. A summary of the rejections.***

The Action rejects claims 2-14 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,457,109 to Antonucci *et al.* in view of Hanif *et al.*, Soloff *et al.*, and Fuchs *et al.* The Action contends that Antonucci *et al.* discloses the use of thiazolidinedione compounds such as troglitazone for the treatment of normal pregnant women or non-diabetic pregnant women due to insulin resistance and/or related risks. It is admitted by the Action, however, that Antonucci *et al.* fails to teach or suggest using thiazolidinedione compounds in Applicants' claimed method for reducing oxytocin-mediated actions such as induction of labor, induction of uterine cramps, induction of milk letdown, or the induction of prostaglandin release.

In an attempt to supplement the deficient teachings of Antonucci *et al.*, the Action cites to Hanif *et al.*, Soloff *et al.*, and Fuchs *et al.* and contends that it would have been obvious to use the thiazolidinedione compounds in Antonucci *et al.* for Applicants' claimed method. Specifically, the Action contends that Hanif *et al.* teaches that "apparently, in the adipocyte, oxytocin acts via the same receptor as is present in uterine and breast smooth muscle and the metabolic actions of oxytocin are due to mechanisms in common ... with ones involved in the action of insulin. The Action, page 13. As for Soloff *et al.* and Fuchs *et al.*, the Action contends that these references disclose that oxytocin is involved with "smooth muscle contraction during birth, milk letdown during lactation and prostaglandin release from endometrium/deciduas and the anmnion." *Id.* (internal citations omitted).

The Action also rejects claims 15-19 under 35 U.S.C. § 103(a) as being obvious over Antonucci *et al.* in view of Hanif *et al.*, Soloff *et al.*, and Fuchs *et al.* and further in view of U.S.

Patent No. 5,370,135 to Dullien. The Action admits that Antonucci *et al.*, Hanif *et al.*, Soloff *et al.*, and Fuchs *et al.* fail to teach the employment of a tocolytic agent in combination with thiazolidinedione in methods for reducing oxytocin-mediated actions (such as milk letdown) in a pregnant mammal. In an attempt to supplement the deficient teachings of these references, the Action cites to Dullien and contends that it would have been obvious to use a tocolytic agent in combination with thiazolidinedione.

Applicants traverse all of the obviousness rejections. Claims 2-19 are not obvious over the cited references.

**ii. *The standard for establishing a prima facie case of obviousness.***

It is well settled that “[t]he examiner bears the initial burden of factually supporting any *prima facie* case of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.” MPEP § 2142.

To establish a *prima facie* case of obviousness, the Action must show: (1) some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) a reasonable expectation of success; and (3) the prior art reference teaches or suggests all of the claim limitations. *Id.*; see also *In re Vaeck*, 947 F.2d 488, (Fed Cir. 1991). With respect to element (1), “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP § 2143.01. If any one of the three elements is missing, an obviousness rejection cannot be maintained.

**iii. *Summary of the presently claimed invention.***

Applicants presently claim “A method for reducing an oxytocin-mediated action in a subject comprising administering to the subject an amount of thiazolidinedione effective to

reduce the oxytocin-mediated action in the subject, wherein the oxytocin-mediated action is induction of labor in a pregnant animal, induction of uterine cramps, induction of milk letdown, or induction of prostaglandin release.” Claim 2.

**2. Claims 2-14 Are Not Obvious Over the Cited References**

***i. There is no motivation to modify or combine the teachings of Antonucci et al. with those of Hanif et al., Soloff et al., and Fuchs et al.***

In order to establish a *prima facie* case of obviousness, the Action must show that there is a motivation to modify or combine the teachings of Antonucci *et al.* with those of Hanif *et al.*, Soloff *et al.*, and Fuchs *et al.* There is no motivation to combine the cited references, and the Action has provided no evidence to the contrary.

Antonucci *et al.* appears to focus on problems concerning insulin resistance and diabetes. As admitted by the Action, this reference does not appear to be concerned with oxytocin-mediated actions—much less reducing the “induction of labor in a pregnant animal, induction of uterine cramps, induction of milk letdown, or induction of prostaglandin release.” Further, a person of ordinary skill in the art would recognize that diabetes is a vastly different disease from reducing the oxytocin mediated actions claimed by Applicants.

Hanif *et al.*’s teachings are similarly deficient. The collaborators in Hanif *et al.* appear concerned with determining “the effects of oxytocin on glucose transport, glucose oxidation, and lipogenesis” and comparing “these effects with the actions of insulin.” Hanif *et al.*, summary. This reference, in fact, does not appear to even mention or suggest thiazolidinedione—much less the use of thiazolidinedione for reducing an oxytocin-mediated action claimed by Applicants. The fact that Hanif *et al.* states that “the metabolic actions of oxytocin may be due to mechanisms in common ... with the ones involved in the action of insulin” does not establish a motivation to combine its teachings with those of Antonucci *et al.* The teachings of Hanif *et al.*

do not appear to mention or suggest reducing oxytocin-mediated actions that are currently claimed by Applicants. *See* MPEP § 2143.01 (“The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also **suggests the desirability** of the combination.” (emphasis added)).

The Action’s statement that Hanif *et al.* teaches that “oxytocin acts via the same receptor as is present in uterine and breast smooth muscle and the metabolic actions of oxytocin are due to mechanisms in common with one involved in the action of insulin” also fails to establish a motivation to combine Hanif *et al.* with Antonucci *et al.* The Action, page 14. The possibility that Hanif *et al.* discloses that the “metabolic actions” of oxytocin are due to mechanisms in common with insulin provides little, if any, suggestion that such teachings could be used for reducing the oxytocin mediated actions claimed by Applicants. It appears that the action is equating an “obvious to try” rationale to support the obviousness rejection. It is well-settled, however, that “‘obvious to try’ is **not** to be equated with obviousness under 35 U.S.C. 103.” *The Gillette Co. v. S.C. Johnson & Son, Inc.*, 919 F.2d 720 (Fed. Cir. 1990); *see also* MPEP § 2145(X)(B).

Similar to the deficient teachings of Antonucci *et al.* and Hanif *et al.*, the Soloff *et al.* and Fuchs *et al.* references also appear to fail to mention or suggest the use of thiazolidinedione. Further, there does not appear to be any suggestion in these references that thiazolidinedione compounds could be used to reduce the oxytocin-mediated actions claimed by Applicants. It appears that the Action may be relying on hindsight to find a motivation to combine these references. The use of hindsight, however, is not appropriate to establish a motivation to combine. *See W.L. Gore Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983).

There does not appear to be any suggestion or motivation in Antonucci *et al.*, Hanif *et al.*, Soloff *et al.*, or Fuchs *et al.* of the desirability to combine their teachings. Because of the lack of motivation to combine, a second element necessary to establishing a *prima facie* case of obviousness has not been established. The obviousness rejection should therefore be withdrawn.

**ii. *There is no reasonable expectation of success that combining Antonucci et al. with the teachings of Hanif et al., Soloff et al., and Fuchs et al. would work.***

A second element necessary to establish a *prima facie* case of obviousness requires a showing of a reasonable expectation of success that combining the teachings of Antonucci *et al.* with the teachings of Hanif *et al.*, Soloff *et al.*, and Fuchs *et al.* would work. This has not been shown by the Action.

Applicants' specification, in non-limiting embodiments, provides surprising and unexpected data that shows the reduction of oxytocin-mediated activities by a thiazolidinedione compound. See the specification at page 29, line 15, to page 31, line 12. These data, for example, show a reduction of prostaglandin E<sub>2</sub> "release by oxytocin when 5 µg/ml of troglitazone was added to a culture of primary human myometrial cells minutes prior to oxytocin treatment." Specification, page 29, line 25. Additional data show a dose of 10 µg/ml of troglitazone (a thiazolidinedione compound) inhibited 10 nM oxytocin-induced contractions in a strip of term myometrial tissue obtained from C-section deliveries. *Id.* at page 30, line 30.

The Antonucci *et al.* reference, by contrast, does not appear to provide any data showing that a thiazolidinedione compound can be used to reduce the oxytocin-mediated actions claimed by Applicants. Rather, this reference appears to be concerned with the treatment of diabetes and not with Applicants' claimed invention, as admitted by the Action. See the Action, page 12. Based on this evidence, or lack thereof, it cannot be reasonably contended that there is a

reasonable expectation of success to modify Antonucci *et al.* to employ Applicants' invention. There is simply no data in this reference to support such an assertion.

The secondary references, Hanif *et al.*, Soloff *et al.* and Fuchs *et al.*, similarly fail. These references lack any data suggesting that the use of a thiazolidinedione compound could be used to reduce the oxytocin-mediated actions claimed by Applicants. The secondary references, in fact, apparently fail to mention thiazolidinedione compounds.

Additionally, the Action's apparent reliance on Hanif *et al.* to support a showing of a reasonable expectation of success is without basis. At best, Hanif *et al.* discloses that "oxytocin acts via the same receptor as is present in uterine and breast smooth muscle and that the metabolic actions of oxytocin may be due to mechanisms in common ... with the ones involved in the action of insulin." Hanif *et al.*, summary. There does not appear to be any disclosure in Hanif *et al.* that shows that thiazolidinedione compounds can be used to treat oxytocin-mediated actions. This lack of disclosure cannot reasonably provide a basis for a showing of a reasonable expectation of success that Applicants' claimed invention would work by combining Antonucci *et al.* with the secondary references. See MPEP § 2143.02. This is especially true where the teachings of Antonucci *et al.* and Hanif *et al.* are concerned with diabetes and the effects of oxytocin on the actions of insulin, respectively.

It is apparent from the cited references that there is no reasonable expectation of success that the combination of their teachings would work. A second element necessary to establish a *prima facie* case of obviousness has therefore not been established.

Based on at least the above arguments and evidence, the Action has failed to establish a *prima facie* case of obviousness. The present obviousness rejection should therefore be withdrawn.

**iii.     *The Antonucci et al. reference is non-analogous art.***

It is improper to cite *Antonucci et al.* against Applicants' claimed invention because this reference is non-analogous art. See *Manual of Patent Examining Procedure* § 2141.01(a). It is settled that "[i]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem, with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). *Antonucci et al.* (1) does not concern Applicant's field of endeavor (oxytocin mediated actions) and (2) is not reasonably pertinent to reducing the induction of labor, uterine cramps, milk letdown, or prostaglandin release in a subject.

*Antonucci et al.* appears to be concerned with the treatment of diabetes and not with reducing oxytocin mediated actions. *Antonucci et al.*, Abstract. The Action, in fact, appears to admit this much. The Action, page 12. Moreover, this reference is not reasonably pertinent to reducing the induction of labor, uterine cramps, milk letdown, or prostaglandin release in a subject. Again, *Antonucci et al.* is pertinent for treating diabetes. There does not appear to be any suggestion that its teachings are relevant towards reducing the induction of labor in a subject, for example. It appears to be a stretch to say that the treatment of diabetes is pertinent to reducing the induction of labor in an animal.

Because *Antonucci et al.* does not concern Applicants' field of endeavor and is not reasonably pertinent to reducing the induction of labor, for example, it is non-analogous art. It is, therefore, improper for the Action to rely on this reference to support the present obviousness rejection.



### **3. Claims 15-19 Are Not Obvious Over the Cited References**

The Action's rejection of dependent claims 15-19 are based on Antonucci *et al.* in view of Hanif *et al.*, Soloff *et al.*, and Fuchs *et al.* and further in view of U.S. Patent No. 5,370,135 to Dullien. Because claims 15-19 are dependent from claim 2, the arguments made in the above section equally apply here and are incorporated by reference.

Applicants further note that the combination of these five references fail to teach each and every element of Applicants' claimed invention—a requirement that is necessary to establish a *prima facie* case of obviousness. Specifically, none of the cited references appear to teach or suggest reducing an oxytocin-mediated action comprising administering thiazolidinedione in combination with a tocolytic agent—much less using this combination to reduce the oxytocin-mediated actions claimed by Applicants. The cited references do not even appear to teach that thiazolidinedione alone, much less in combination with other tocolytic agents, can be used to reduce such oxytocin mediated actions.

Because all three elements necessary to establish a *prima facie* case of obviousness have not been established, the present obviousness rejection of claims 15-19 is therefore improper and should be withdrawn.

### **E. The Double Patenting Rejection is Overcome**

The Action rejects claim 1 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 U.S. Patent No. 6,537,566. Applicants note that claim 1 was cancelled prior to the date of the Action. Applicants believe that the present double patenting rejection is therefore improper and should be withdrawn.

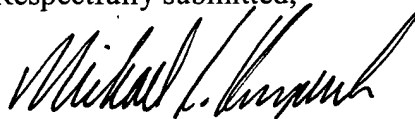
**F. Conclusion**

Applicants believe that the present document is a full and complete response to the Office Action dated May 19, 2004. The present case is in condition for allowance, and such favorable action is requested.

### **III. A Petition for a Three-Month Extension of Time:**

Pursuant to 37 C.F.R. § 1.136(a), Applicants petition for an extension of time of three months to and including November 19, 2004, in which to respond to the Office Action dated May 19, 2004. Pursuant to 37 C.F.R. § 1.17, a check in the amount of \$490.00 is enclosed, which is the process fee for a three-month extension of time for a small entity status. If the check is inadvertently omitted, or should any additional fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed materials, or should an overpayment be included herein, the Commissioner is authorized to deduct or credit said fees from or to Fulbright & Jaworski Deposit Account No. 50-1212/UTSG:240US.

Respectfully submitted,



Michael R. Krawzsenek  
Reg. No. 51,898  
Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P.  
600 Congress Avenue, Suite 2400  
Austin, Texas 78701  
512.536.3020 (voice)  
512.536.4598 (fax)

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